STATE OF NEW YORK

COMMUNITY DEVELOPMENT BLOCK GRANT

DISASTER RECOVERY (CDBG-DR) PROGRAM

NON-SUBSTANTIAL AMENDMENT NO. 33

April 18, 2023

Additions to: New York State Action Plan Incorporating Amendments 8-32

In sections: Proposed Allocation of Funds, NY Rising Housing Recovery Programs, Rebuild by Design Programs

Summary:

Action Plan Amendment 33 (APA 33) will address the following items:

A. *Proposed Allocation of Funds:* Table and references to allocation amounts updated to reflect the reallocation of funds between programs.
B. *Living with the Bay:* The State is providing updates to the Living with the Bay Rebuild By Design project to reflect updated budgets, scopes and timelines for the various focus areas as they proceed through permitting and construction, including adding the Hempstead Bay Restoration component to the Long Beach WPCP focus area. The State prepared an updated Benefit Cost Analysis (BCA) of the Living with the Bay project to reflect the updated scope, benefits, costs, projects and other details of the project included in this Action Plan Amendment. The updated BCA can be reviewed at https://stormrecovery.ny.gov/sites/default/files/crp/community/documents/LWTB2023BCANarrative.pdf
C. *Offsetting Demolition Costs:* Updates to include demolition costs as eligible costs for recapture applicants in the NY Rising Homeowner Recovery Program and the NY Rising Rental Buildings Recovery Program.

Changes are indicated in red text.

A. Proposed Allocation of Funds

Description of changes: All updates associated with the proposed APA 33 allocation of funds will be made to the tables at page 7 and page 57 of the State's Action Plan. Allocation amounts and unmet needs totals to reflect this proposed reallocation will also be updated throughout the Action Plan wherever referenced.

As described in the State's Action Plan (Updated Impact and Unmet Needs Assessment, pg. 11), there remain unmet needs in all recovery categories of Housing. As applicants move through the Housing Program, the State assesses need based on the best available information to ensure that the allocations are sufficient to provide awards to eligible applicants. The proposed APA 33 allocation of funds considers the unmet needs analysis already identified in the State's Action Plan and the need of eligible applicants in its Housing programs.

The State has identified additional need in the Public Housing Assistance Relief component of the NY Rising Housing Program due to the increased cost of previously contemplated scope. To ensure that the State meets its stated objective of addressing the unmet residential repair, reconstruction, or resilience needs of Public Housing Authorities, the State is reallocating funds from the Multi-Family Affordable Housing component of the NY Rising Rental Buildings Recovery Program. The remaining allocation for the Multi-Family Affordable Housing Program will be sufficient to provide awards to eligible applicants, but as applicants move through the program the State will continue to assess the need.

Additionally, the State is updating its administration allocation to reflect the 5% of program income funds eligible for this category. Funds are being reallocated from the Local Government and Critical Infrastructure and Community Reconstruction Programs, where project costs have been lower than previously estimated.

From pages 7 and 57 of the New York State Action Plan:

Program	APA 32	APA 33 Change	Revised APA 33 Allocation
Total of All Programs	**$4,501,382,000**	**$0**	**$4,501,382,000**
Housing	**$2,878,359,139**	**$0**	**$2,878,359,139**
NY Rising Homeowner Recovery Program	**$1,849,277,859**		**$1,849,277,859**
NY Rising Condominium & Cooperative Program	**$24,952,772**		**$24,952,772**
Interim Mortgage Assistance Prorgam	**$72,000,000**		**$72,000,000**
NY Rising Buyout and Acquisition Program	**$637,323,760**		**$637,323,760**
NY Rising Rental Buildings Recovery Program	**$260,679,853**	**($1,400,000)**	**$259,279,853**
Rental Properties	$130,204,853		$130,204,853
Multi-Family Affordable Housing	$130,475,000	($1,400,000)	$129,075,000
Public Housing Assistance Relief Program	**$28,247,207**	**$1,400,000**	**$29,647,207**
Manufactured Home Community Resiliency Program	**$5,877,688**		**$5,877,688**
Economic Development	**$118,546,542**	**$0**	**$118,546,542**
Small Business Grants and Loans	**$88,970,013**		**$88,970,013**
Business Mentoring Program	**$298,736**		**$298,736**
Tourism and Marketing	**$29,277,793**		**$29,277,793**
Community Reconstruction	**$515,381,303**	**($2,500,000)**	**$512,881,303**
NY Rising Community Reconstruction Program	**$515,381,303**	**($2,500,000)**	**$512,881,303**
Infrastructure and Match	**$546,132,073**	**($1,725,000)**	**$544,407,073**
Local Government, Critical Infrastructure and Non-federal Share Match Program	**$543,432,073**	**($1,725,000)**	**$541,707,073**
Resiliency Institute for Storms and Emergencies	**$2,700,000**		**$2,700,000**
Rebuild by Design	**$222,118,843**	**$0**	**$222,118,843**
Living with the Bay: Slow Streams	**$125,000,000**		**$125,000,000**
Living Breakwaters: Tottenville Pilot	**$97,118,843**		**$97,118,843**
Administration & Planning	**$220,844,100**	**$4,225,000**	**$225,069,100**

B. Living with the Bay

Description of changes: The State is providing updates to the Living with the Bay Rebuild By Design project to reflect updated budgets, scopes and timelines for the various focus areas as they proceed through permitting and construction. The State also prepared an updated Benefit Cost Analysis (BCA) of the Living with the Bay project to reflect the updated scope, benefits, costs, projects and other details of the project included in this Action Plan Amendment. The updated BCA can be reviewed at https://stormrecovery.ny.gov/sites/default/files/cr p/community/documents/LWTB2023BCANarrative.pdf

Through this Action Plan Amendment, the State is investing Living with the Bay funds in the Hempstead Bay Restoration component of the Long Beach WPCP focus area. The Long Beach WPCP resilient pump station and force main LWTB scope and the related plant decommissioning and satellite pump station mitigation projects, which are outside the scope of the LWTB project, have been awarded $78.5 million in FEMA PA 406 Hazard Mitigation funds, with additional funds expected to be added to the award to cover the majority of the $169.2 million in identified project costs for this group of projects. Due to CDBG-DR requirements relating to Duplication of Benefits and Order of Assistance, FEMA funds awarded to these projects will displace Living with the Bay funds budgeted for the Long Beach WPCP focus area. Therefore, this APA reduces the previously approved LWTB investment of $24 million for the Long Beach WPCP pump and force main scope to up to $16.5 million for eligible costs for this scope, including non-federal share match and additional necessary and reasonable costs that are not covered by duplicative sources of funding.

The State will use the remaining $7.5 million budgeted for the focus area in the State's Action Plan to implement the Hempstead Bay Restoration component of the Long Beach WPCP focus area. This component will complement the approved focus area scope by restoring portions of the Black Banks and Pearsalls Hassocks located in Hempstead Bay along the path of the new Long Beach WPCP force main which will be constructed as part of the approved LWTB project. The component would restore the natural infrastructure of these marsh islands by filling mosquito ditches and creating natural tidal channels on the Black Banks Hassock, and removing abandoned sludge tank and dock facilities, stabilizing the island's shoreline and restoring low marsh and upland habitats on Pearsalls Hassock. The component would add to the Long Beach WPCP focus area's contributions to the LWTB objective of preserving quality of life in the community during natural disasters, emergency events, and tidal inundation by restoring tidal hydrology and upland habitat which will contribute to attenuating storm surge impacts on the surrounding communities, including in the tidal reaches of the Mill River. The component will also address the LWTB objective of incorporating environmental and water quality improvements within projects by removing and remediating abandoned industrial infrastructure in Hempstead Bay. In the long term, combined with other expected water quality improvements associated with the Long Beach WPCP focus area, this component is expected to facilitate natural marsh regrowth by stabilizing the marsh island shorelines and restoring natural habitats, which in turn contribute to further hazard mitigation through wave attenuation for communities along Hempstead Bay, including in the Mill River watershed.

From page 50 of the New York State Action Plan:

Rebuild By Design Unmet Needs

As noted in the October 16, 2014, Federal Register Notice, HUD allocated a portion of the funds for each awarded RBD project – Living Breakwaters: Tottenville Pilot and Living with the Bay: Slow Streams. The Notice requires grantees to identify any potential gap or shortfall in the RBD funding and provide a strategy and description of funds anticipated to be generated or secured in leveraging the CDBG-DR

allocation for RBD project completion as well as any additional CDBG-DR funds the grantee anticipates dedicating to the RBD project. Based on the estimated budgets provided in the RBD plans, the State identified a total preliminary funding gap of $13.1 million for the Living Breakwaters project on Staten Island. The State underwent a two-pronged approach to review and fill this gap.

First, the State analyzed the budgets provided by the RBD teams and calculated any additional planning and program delivery required to fully execute the project and meet the requirements set out by HUD. The planning and scoping through the environmental review process helped shape the needs of the project.

Once a firm cost for the project was clear, the State began to execute the strategy outlined in this Action Plan to leverage funds to fill the gap left in the budget. As the State moves through the leveraging process, the State reassessed the project as needed to identify areas where funding is secured and where funding gaps still remain. The State will work together with stakeholders and federal partners to ensure the strategies in place lead to successful implementation of the project.

Having completed the design phase and value engineering process, the Living Breakwaters project's total budget as of APA 32 is now $114 million, resulting in a funding gap of $16,881,157. This funding gap will be covered by additional State funding, resulting in $0 in unmet need for the project.

~~As explained in APA 26, t~~The State has identified approximately $54~~22~~ million in unmet need for Living with the Bay, related to the Long Beach WPCP focus area. The proposed subrecipient intends to address the remaining unmet need through adding additional eligible project costs to its approved ~~an application for additional State grants and a~~ FEMA PA 406 Mitigation grant for the Long Beach WPCP group of projects. ~~The proposed subrecipient~~Nassau County has made commitments to bridge any shortfall if additional funds ~~grants~~ are not secured.

As the Living with the Bay project proceeds through the design phase, the State will monitor the project's budget to reassess unmet needs. The State will undertake the leveraging process outlined in this Action Plan for any unmet needs identified in the future.

As a result, the State includes a $53.8~~21.5~~ million dollar gap in its broader estimate of remaining infrastructure needs (Table 28).

Table 28: Unmet Needs for the State's RBD Projects

RBD Project	Total Project Cost	October 16th 2014 Allocation	Unmet Need
Living with the Bay	$244.8~~189.2~~	$125.0	$53.8~~21.5~~
Living Breakwaters	$114	$60.0	$0
Total	**$358.8~~303.2~~**	**$185.0**	**$53.8~~21.5~~**

Source: Programmatic Data

From page 102 of the New York State Action Plan:

Rebuild by Design Projects

After Superstorm Sandy's devastating sweep over the northeastern part of the United States, President Obama created the Superstorm Sandy Rebuilding Task Force (the Task Force) with the purpose to redesign the approach to recovery and rebuilding through regional collaboration and emphasis on the growing risks of climate change. The Task Force partnered with HUD to initiate the Rebuild by Design (RBD) competition, which was devised to invite the world's most talented designers and engineers to bring their expertise in flood mitigation and coastal resiliency to Sandy-impacted regions. The six RBD competition finalists were announced on June 2, 2014. Two of the six projects were awarded to New York State to implement.

Table 36: New York State awarded proposals

Project	Location	Total Project Cost	CDBG-DR Allocation
Living Breakwaters: Tottenville Pilot	Richmond County	$114,000,000*	$97,118,843
Living with the Bay: Slow Streams	Nassau County	$244,750,000~~189,226,000~~**	$125,000,000

**Based on value engineering estimates post 100% design; ** The design for each component of LWTB has reached~~ranges from preliminary designs through~~ 100% (final) designs*

The goals of New York State's RBD implementation plan are to make communities in Richmond County (Staten Island) and Nassau County (Long Island) more physically, economically, and socially resilient in the face of intense storm events. Both proposed projects represent innovative, flexible, and scalable interventions that could be replicated in other parts of the State, nation, and globe. Each project must undergo a rigorous environmental review and permitting process, which will include the assessment of potential alternative designs and/or projects.

Monitoring plans for large scale projects such as RBD must be developed in coordination with federal and State permitting agencies, as well as following a rigorous data collection and data review program during design. The monitoring plan strategy for Living Breakwaters: Tottenville Pilot and Living with the Bay: Slow Streams is described in the project section below.

From page 115 of the New York State Action Plan:

Living with the Bay: Slow Streams

National Objective: Urgent Need

Eligible Activity: Rebuild by Design 105 (a) all provisions 42 U.S.C. 5305(a)

CDBG-DR Allocation: $125,000,000

Project Description: Based in Nassau County, Long Island, the $244.75~~189~~ million Living with the Bay (LWTB) Rebuild by Design (RBD) project aims to increase the resiliency of communities along the Mill River project area and around the South Shore Back Bay.

From pages 120-121 of the New York State Action Plan:

The eight LWTB focus areas are:

- **Focus area – Hempstead Lake State Park (HLSP) Improvements**: LWTB will address stormwater storage capacity management by rehabilitating and enhancing an existing 100+ year old dam located at HLSP. As an instrument for flood mitigation, the dam (with an operating gatehouse) will provide for reduced and delayed peak flows to downstream water bodies and communities during extreme weather events. This project will have several significant co-benefits, such as reducing the risk posed to downstream communities by dam failure and rehabilitation of this historic structure. Other improvements at HLSP, including wetland rehabilitation and dam repairs in the Northern Ponds area, will further enhance stormwater flow attenuation, improve water quality in the watershed by removing contaminants in urban run-off and provide enhanced habitat and new, expanded passive recreational opportunities. The HLSP improvements will also include a new facility to be used for education and as a coordination center during emergencies, as well as improved waterfront access at various locations, further improving recreational opportunities in this critical State park.
- **Focus area – Smith Pond Drainage Improvements**: LWTB will improve water quality, enhance recreation, restore the ecological system to promote native aquatic species and expand the hydraulic surge capacity of the pond. As of APA 26, project elements anticipated include the removal of invasive species and replacement with native plants on the shores of the pond, improvements to existing pathways and overlooks, connection to the Mill River Greenway, adding a fish ladder, adding floodwalls to the eastern and western shores of the pond, and making improvements to the existing weir and stormwater improvements to an adjacent parking lot .
- **Focus area – Stormwater Retrofits**: The State will strategically install green infrastructure including, but not limited to: drywells, bioswales, permeable pavement, and select bioretention and infiltration interventions throughout the project area. Per project designs as of APA 33~~26~~, improvements along East and West Boulevards will mitigate the effects of tidal and stormwater inundation through the deployment of check valves, bioswales, replacing outdated storm drainage systems, road surface recontouring, installing new curbs and gutters, and permeable pavement, while stormwater best management practices such as bioswales and surface infiltration systems will be included in other focus areas to retain, treat and delay stormwater before it enters the Mill River.
- **Focus area - East Rockaway High School Hardening**: LWTB completed installation of a bulkhead to reduce erosion, protect against storm surges, and facilitate the raising of the athletic fields to provide better stormwater management. Drainage improvements were also added to the parking areas for better stormwater management and improved water quality. The project also incorporated a bioswale and a AquaSwirl water filtration system to improve stormwater retention and water quality before entering the Mill River, backflow prevention devices, and a generator to support the school as an emergency shelter during disasters.
- **Focus area – Lister Park:** Per project design as of APA 33~~26~~, LWTB will implement a suite of resiliency, water quality and drainage improvements to an area along the Mill River comprised of the existing Village of Rockville Centre's Department of Public Works (DPW) storage yard and several public parks known as Bligh Field, Centennial Field, Lister Park, and Tighe Field. The improvements include a living shoreline to combat erosion and filter urban and stormwater runoff entering the Mill River, bioretention basins, permeable pavement parking lot and drainage improvements to improve stormwater management and treatment, flood protection improvements to protect surrounding residential areas, and greenway connections and an improved overlook to connect residents to the Mill River.

- **Focus area – Greenway Network:** LWTB will create greenways connecting communities with sections of the project area and focus areas along the Mill River, including north from HLSP, through HLSP south to Smith Pond and Lister Park and connecting the greenway further south to Nassau County Bay Park.
- **Focus area – Long Beach Water Pollution Control Plant Consolidation Project**: LWTB will convert the existing Water Pollution Control Plant (WPCP) at Long Beach into a resilient pump station that will send untreated sewage~~effluent~~ to the newly upgraded ~~Bay Park Sewage Treatment Plant~~South Shore Water Reclamation Facility. Tidal inundation from Superstorm Sandy overwhelmed the Long Beach plant interrupting treatment, resulting in the release of untreated effluent into the South Bay. Damage from Sandy has resulted in legacy operational issues affecting the quality of treatment that the WPCP provides, resulting in the continued release of undertreated effluent with high levels of nitrogen which negatively impacts tidal marshes and water quality throughout the South Bay, and communities in the Mill River watershed such as Bay Park, Oceanside and East Rockaway which are impacted by the Bay's tides and storm surge. The Hempstead Bay Restoration component of this focus area will restore the natural infrastructure of two marsh islands through removal of abandoned industrial infrastructure, habitat restoration, ditch remediation and the creation of natural tidal channels. The project will preserve quality of life during increasingly frequent storm events and increase community resiliency in the face of sea level rise by mitigating the hazard of storm impacts that cause the release of untreated effluent to the Bay and attenuating storm surge by addressing tidal hydrology and restoring upland habitats on the Bay's marsh islands. The project also incorporates environmental, coastal resiliency and water quality benefits for the LWTB project area by ensuring a higher standard of treatment of effluent at the Bay Park plant and removing abandoned industrial infrastructure in the marsh islands.
- **Focus area – Social Resiliency Programs**: LWTB has worked with relevant community organizations and educational institutions to develop public education programs. These education programs will include environmental and historical education for schools and the public. Education programs include a Certificate Program for local government policy makers and staff on environmental sustainability, which will contribute to a culture of focusing on the environment in local decision-making. LWTB will also develop environmental technician job training programs ~~with a focus on green infrastructure~~, contributing to the social resiliency of communities along the Mill River and South Bay.

From page 123 of the New York State Action Plan:

Focus Area Timelines, Budgets, and Detailed Descriptions

The following sections provide further details on each of the eight LWTB Focus Areas outlined above, including current scope and design and construction schedule. Each Focus Area will be designed and certified by a New York State Licensed Professional Engineer. The useful life of the interventions was considered to be 50 years for planning and economic benefit evaluations. However, the capital infrastructure is anticipated to remain in use long past this period.

Focus Area: Hempstead Lake State Park Improvements

As the Mill River watershed is an interconnected system, the LWTB project recognizes that both upstream and coastal interventions were required to address two of the largest vulnerabilities faced by surrounding communities during Superstorm Sandy: coastal surge and stormwater flooding. The interventions proposed within HLSP improve water quality and preserve the value of existing habitats within the Park while simultaneously introducing recreational and educational opportunities for citizens to learn about and connect with their natural environment, therefore contributing to the community's social resiliency. Interventions within HLSP are organized into four sections:

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1. Dams, Gatehouse and Bridges
2. Northwest (NW) and Northeast (NE) Ponds
3. Environmental Education and Resiliency Center
4. Greenways, Gateways and Waterfront Access.

As of APA 3326, the estimated budget for this focus area is approximately $43.435 million, including $35 million in CDBG-DR LWTB funds and $8.4 million in State funds. The HLSP improvements are expected to reach 100% design in the first quarter of 2021 with construction expected take to take place from the second quarter of 2020 through the first second quarter of 20232. As a stakeholder and a recipient of disaster recovery funds from GOSR, the NYS Office of Parks, Recreation and Historic Preservation (State Parks) is responsible for funding the long-term operation and maintenance of the overall HLSP improvements.

From pages 127-128 of the New York State Action Plan:

Focus Area - Smith Pond Drainage Improvements

Smith Pond, shown in Figure 10, is a 22-acre freshwater pond located in the center of the LWTB project area just north of the Sunrise Highway in the Village of Rockville Centre. The pond is associated with Morgan Days Park and is managed by the Village of Rockville Centre. The Pond is the confluence point of the two primary drainage branches (Pines Brook and Mill River) conveying water from the north end of the Mill River watershed — one on the north eastern side coming from HLSP, and the other on the north western side originating north in the Garden City area.

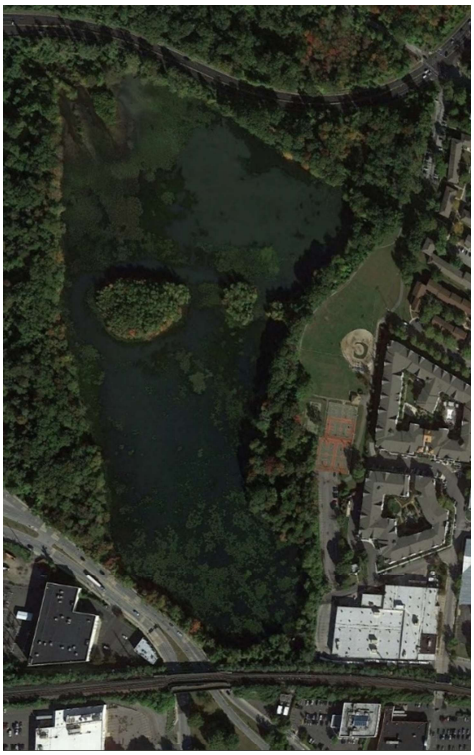

Figure 10: Smith Pond

The Pond receives both the flow (water quantity) and the nutrient loads (water quality) for the entire watershed. Smith Pond is also a unique location as the connecting water body between the upper freshwater system and the lower tidal and salt water system. The Pond's location provides an advantageous opportunity to incorporate RBD and LWTB concepts of ecological restoration, access and urban quality and social resiliency in the Mill River corridor.

As of APA 26, the proposed improvements under consideration at Smith Pond are habitat restoration, storm attenuation, and improving public access. A dredging management plan was prepared evaluating the opportunity to increase water depths to greater than eight feet, but high costs associated with the disposition of dredged material rendered this option impractical. Instead, the addition of flood-walls on the east and west sides of the pond will achieve comparable benefits by supplementing storm runoff attenuation capacity by increasing pond volume and therefore removing areas adjacent to Smith Pond from the 100-year floodplain. Improvements to the weir will be made to accommodate impacts the flood walls have on the flood waters of the pond, and address any weaknesses determined through an inspection, to ensure its longevity.

The proposed interventions will also include improving environmental conditions. Currently, shallow water depths in the Pond, combined with high nutrient loads from upstream runoff, contribute to invasive plant over growth and dominance in the Pond. The proposed project will remove invasives, particularly lily pads, which will provide improved habitat needed for fish and other aquatic life and result in significant environmental improvement. The inclusion of a fish ladder at the Pond weir will provide passage for both herring and the American eel, and as a result of the removal of invasives, the fish will have appropriate habitat in the Pond. Invasives will also be removed from certain sections of the shore and will be replaced with native plants, further improving the natural flora and fauna of the park. The project also proposes improvements to existing pathways and overlooks, as well as connection to the Mill River Greenway, which will improve public access to the waterfront by connecting the South Shore's communities to the natural beauty of the pond and park. Finally, the project also proposes installing permeable pavement in the adjacent parking lots to improve stormwater management and drainage.

One of many benefits of this project will be the ability to monitor this work as an example of a successful scalable strategy that could be replicated elsewhere in other highly developed watersheds. Currently, the estimated budget for this focus area is approximately $8,750,000~~$11.6million~~. The Smith Pond Drainage Improvements began construction in December of 2020 and were completed in October of 2022. ~~are expected to reach 100% design in the second quarter of 2020 with construction expected take place from the fourth quarter of 2020 to the second quarter of 2022.~~

From pages 131-139 of the New York State Action Plan:

The East and West Boulevards project includes stormwater BMPs discussed above to reduce the risk and impacts of flooding on these vital arteries during both rain and tidal flooding events. As of APA 26 the proposed interventions include installing 13 check valves at drainage outfalls that are located below the high tide elevation, allowing tidal waters to enter the drainage system through the unprotected outfalls and overflow inlet structures onto the streets. These valves will prevent tidal waters from entering the system but allow for storm water flow to exit the system during low tides. In addition, proposed porous asphalt shoulders on both sides of the roadways with new stone reservoirs under the roadway pavement represent a multifunctional, low impact development technology that integrates ecological and environmental goals, and allows for stormwater infiltration and retention during storm events. The proposed project will also include bioswales surrounding the Grand Canal. Finally, the project will replace the outdated storm drainage system at North Boulevard and recontour the road surfaces on East, West, and North Boulevards and install new curbs and valley gutters to improve overall drainage. Currently, the estimated budget for this focus area is approximately $7.4 million. The East and West Boulevards project ~~is expected to reach 100% design in the second quarter of 2020, with~~ began construction in April of 2022 and was completed in December of 2022.~~struction expected take place from the fourth quarter of 2020 to the third quarter of 2022~~.

The LWTB project also incorporates some of the green infrastructure stormwater BMPs discussed above into other focus areas, such as bioswales along the Greenway, and a surface infiltration system at Lister Park, which will contribute to stormwater delay and retention before it enters the Mill River.

Focus Area – East Rockaway High School Hardening

The East Rockaway High School is situated along the west bank of the Mill River, just north of Pearl Street, in Nassau County (see Figure 16). Superstorm Sandy caused heavy rains and storm surge resulting in flood waters flooding the School's northern and eastern property and entering the School's buildings and facilities. The boiler room, auditorium and gymnasium wings, teacher parking lot, and sports fields received the most pronounced damage. The building's floor crawl space typically has flooding associated with normal tidal cycles due to porous soil conditions, however the high level of water from Sandy caused scour below the pile caps and left pools of sewage & fuel oil polluted water. Lack of sufficient backwater valves also created water infiltration of the sanitary outfalls.

Figure 16: East Rockaway High School

The School's buildings and grounds were repaired after Sandy and a recently approved FEMA project is intended to mitigate the flooding of the School's buildings. The teacher parking lot and athletic fields routinely flood from rainfall and, ~~-~~the sport fields remains vulnerable to frequent tidal flooding and shoreline erosion. The bleachers and two story storage and press box at the sports field are on the verge of falling into the Mill River due to ongoing shoreline erosion.

The presence of the continuous stretch of publicly owned land along the western bank of the river at the School and to the north and east of the School offers an opportunity to implement the RBD LWTB goal of protecting and increasing the resiliency of a critical community asset from flood damage. The ~~As of APA 26, potential~~ resiliency interventions for protection and social resiliency include linear flood risk mitigation and shoreline stabilization with design considerations to alleviate the tailwater and surge flooding occurring in the teacher parking lot and sports field~~. Living shoreline elements with stormwater outlet treatment systems to improve water quality in the area are also being incorporated~~ along with the installation of a backup generator to provide power during disruptions. The project also installed bioswale, AquaSwirl, dry wells, and subsurface storage in the parking lots, alongside resurfacing and repitching them to address drainage and water filtration.

As noted, the School's sports field bleachers are located at the river bank. Due to ongoing erosion of the bank, the structural stability of these stands is being compromised. The ~~design proposal~~project provides an integrated solution that stabilizes the river bank, raises its flood protection level, including by adding backflow preventers to the bulkhead outfalls, and enhances the conditions for the grandstand. The design incorporates the current 100-year FEMA flood map and calls for an elevation of 7.2 feet.

The goal for this area is to ~~determine the feasibility of design options that help~~ reduce the School's vulnerability to flooding and stabilize its eroding shoreline.

~~Currently, the estimated budget for this focus are is approximately $6 million. The East Rockaway High School Hardening project is expected to reach 100% design in the second quarter of 2020 with construction expected take place from the fourth quarter of 2020 to the third quarter of 2022.~~

Construction of the East Rockaway High School Hardening project commenced in November of 2020 and was completed in August of 2021 with a final construction budget of $4,601,069.96.

Focus Area – Lister Park

The Lister Park Improvements project area is located within a residential setting within the Village of Rockville Centre and comprises the existing Village Department of Public Works (DPW) storage yard and several public parks known as Bligh Field, Centennial Field, Lister Park, and Tighe Field. The site is bounded by Merrick Road to the north and East Rockaway High School to the south and by residential developments to the east and west.

During Superstorm Sandy, many residential properties along the Mill River were inundated with stormwater. The area experiences routine flooding and ongoing erosion along the river's edge. Currently, the parking lots for Lister Park, Tighe Field, and Centennial Park are subject to flooding during higher rainfall events and tidal backup. Areas along the east and west banks of Mill River experience shoreline erosion due to high river velocities and tides and/or have been hardened, eliminating their ecological habitat. At present, bike and pedestrian access to the waterfront in the project area is limited.

The goals for the Lister Park Improvements project include providing flood protection to the surrounding community to mitigate future damages to the community, like those experienced from Superstorm Sandy, through flood defenses and stormwater management improvements. The project will also involve enhancing waterfront access, providing connectivity along the Mill River waterfront to existing pathways, enhancing habitat, restoring environmental health, and improving water quality through improvements such as the Greenway, bioretention basins and replacing the overlook at Bligh Field.

As of APA 26, the proposed improvements for Lister Park include a living shoreline along a majority of the project area to provide bank stabilization and enhance habitat along Mill River. Bioretention basins (i.e. green infrastructure) will be constructed at Tighe Park to provide water quality treatment for the parking lot prior to release to the Mill River.

The parking lot at Centennial Park will be re-graded and repaved to eliminate the current ponding that occurs there. In addition, a bioretention basin will be constructed to provide water quality treatment from the parking lot prior to release into the Mill River. The existing inlet at the low point of the parking lot will be removed and replaced with an overflow inlet in the bioretention basin for larger storm events for conveyance to the Mill River. The project includes the construction of a new permeable pavement parking lot at Bligh Field utilizing a permeable concrete panel system to more efficiently provide water retention and durability in a high water table environment, which prevents direct stormwater runoff into the Mill River.

The project also includes connecting the parks to the planned Mill River Greenway, to connect communities in the LWTB project area to the river. In addition, to increase access to the waterfront, the existing overlook located at Bligh Field near the parking lot will be reconstructed to provide visual access to the waterfront. The overlook will be accessible from the new greenway and parking lot. Three additional overlooks in the park will be replaced by the project to provide visual access to the waterfront.

Finally, a knee wall and clay berm will be constructed along the west side of Bligh Field parking lot to provide flood protection to homes located on Riverside Road which are susceptible to flooding from a 100-year storm event, while reducing the footprint of flood protection infrastructure. The knee-wall alignment at Riverside Road and Bligh Field parking lot crossings will be complimented with floodbreak panels to allow continued access during non-flood time periods. The project will also construct four automatically deployable flood gate systems to improve the park's flood defense system.

Through these proposed improvements, the project will improve community resilience to sea level rise and increasingly frequent extreme weather events as well as preserve quality of life during these events with backflow prevention, parking lot regrading, and porous greenway to better manage stormwater. The improvements will also restore environmental health and water quality using Green Infrastructure (bioretention basins and living shorelines) which will promote aquifer recharge while reducing localized flooding due to storm runoff; while at the same time providing new opportunities for residents of the South Shore to connect with the waterfront.

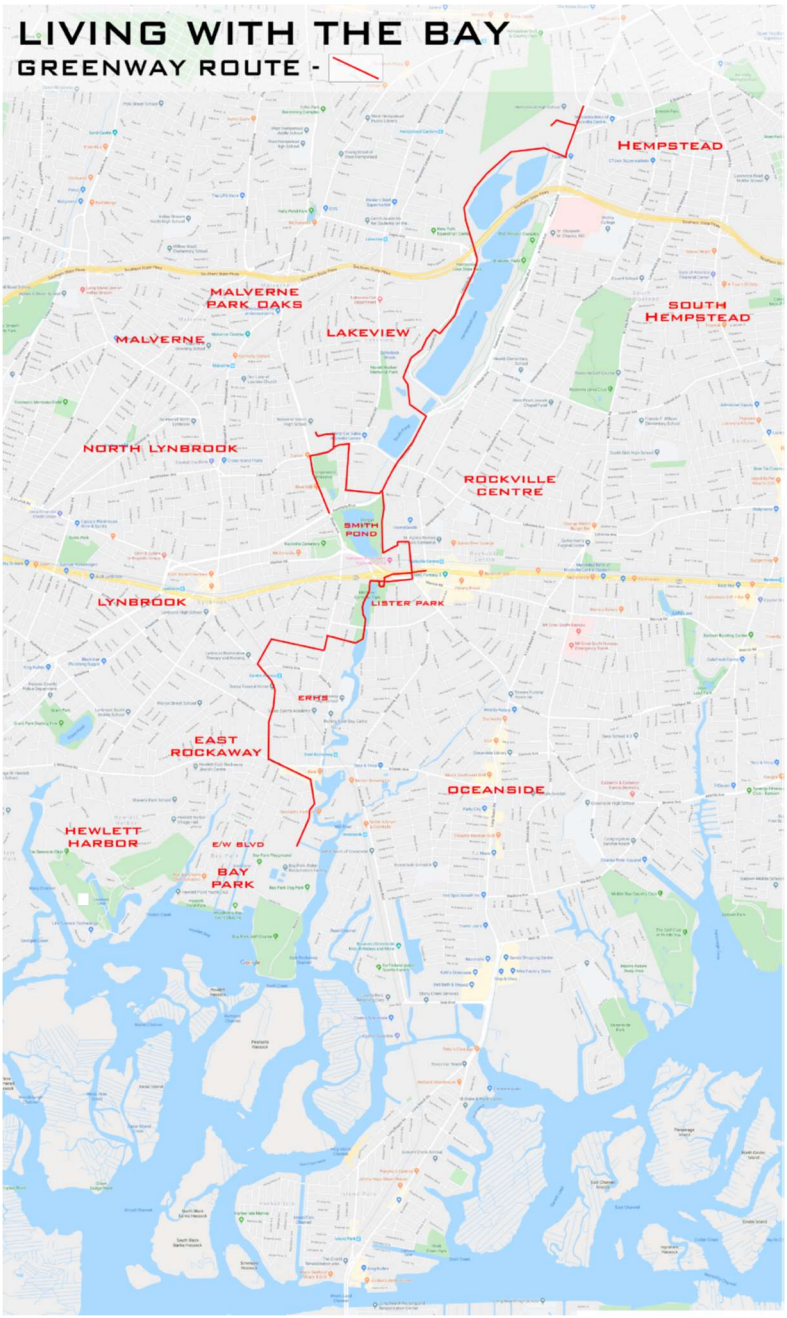

Figure 17: Greenway Network Concept

Currently, the estimated budget for this focus area is approximately $10.6 million~~4,000,000~~. The Lister Park project began construction in December 2020 and is currently underway with completion anticipated during the Summer of 2023.~~is expected to reach 100% design in the second quarter of 2020 with construction expected take place from the fourth quarter of 2020 to the third quarter of 2022.~~

Focus Area – Greenway Network

The HLSP improvements, Smith Pond, and Lister Park projects each have greenway components within them. The focus of the Greenway Network project is to provide waterfront access in other sections of the LWTB project area and connect the greenways together in a continuous system.

Continuous safe pedestrian pathways from residential areas to the waterfront in the LWTB project area are rare and if they exist, they are fragmented with little connectivity for any significant lengths. The winning RBD LWTB project proposal noted that the overall scale and existing land use of the area makes it ideal for biking, walking, and boating, but existing routes toward or along the river and bay are ad-hoc and discontinuous,

and the adjacent neighborhoods' access to the river is poor. Combining this fact with the potential degradation of stormwater management and environmental habitat has created a concern for the sustainable resilience of the community.

The RBD LWTB design called for the landscapes along Mill River to be interconnected into a strong "blue green" framework in order to improve public accessibility and visibility of the Mill River as a means to increase safety, and enhance the ecological and landscape value of this historic water course. It will also increase recreational opportunities for the densely populated communities serving as a long-term positive benefit to the residents. The concept for the Greenway Network is shown in Figure 17.

The development of the Greenway Network is intended to be a strong feature for the suburban layout along and adjacent to the Mill River, thus transforming it into an attractive public amenity. The intent is to take the currently disconnected recreational and open resources in the LWTB project area~~, as well as schools~~, and link them into a coherent system of pedestrian and bike paths, resulting in the creation of a new greenway. Another goal of the Greenway Network is to adopt and develop new sites along the Mill River that are presently underutilized and/or not accessible, and make these sites productive towards the LWTB objectives.

As a linear element and where space permits, the paths will serve as interceptors of surface stormwater runoff through parallel bioswales, and~~.~~ where practical, typically include 10-foot-wide permeable pavement with water storage and infiltration under the path. ADA accessibility, rain gardens, pollinator gardens, educational signage, and amenities are also incorporated along the length of the Greenway.

Currently, the estimated budget for this focus area is approximately $8~~13.2~~ million. The Greenway Network project began construction in December of 2020 and was completed in December 2022. ~~is expected to reach 100% design in the second quarter of 2020 with construction expected take place from the fourth quarter 2020 to the third quarter of 2022~~.

Focus Area – Long Beach Wastewater Consolidation Project

The Long Beach Wastewater Consolidation project (WPCP) is expected to benefit residents of the areas of the Mill River watershed that experience tidal inundation and storm surge from the South Bay, including the tidal reach of the river itself, by mitigating the effects of tidal inundation and storm surge by restoring tidal hydrology and upland habitat on the Bay's marsh islands and removing the potential for release of untreated effluent into the Bay during future storms, and improving water quality by removing and remediating abandoned industrial infrastructure on the Bay's marsh islands and by ending the ongoing release of undertreated effluent from the Long Beach WPCP. In the long term, water quality improvements associated with the project are expected to facilitate natural marsh regrowth in the Bay as

well as allow for future long term interventions to restore the marsh, which would in turn result in further hazard mitigation for residents of the areas of the Mill River affected by storm surge from the Bay, including along the Mill River itself, deriving from healthy marshes' ability to attenuate wave action.

The Long Beach WPCP is located on the northern, South Bay side of the Long Beach barrier island, directly across the Bay from the mouth of the Mill River. Built in 1951, the plant treats wastewater from the City of Long Beach and the hamlet of Lido Beach, discharging the effluent into Reynolds Channel at the southern end of the Bay. Due to its location directly adjacent to the Bay and in the Special Flood Hazard Area, this critical infrastructure faces significant hazards from coastal flooding and storm surges, in an area which, as a barrier island, is already highly vulnerable due to location and topography. Furthermore, the location of critical equipment in facility basements, low-lying building entrances, and low-lying electrical equipment increase the plant's susceptibility to flooding from storm-surge and tidal inundation during storm events. In the face of expected sea level rise and increasingly strong and frequent storms, the plant's high vulnerability to flooding hazards will only increase.

During Superstorm Sandy, the Long Beach WPCP was overwhelmed by storm surge both from the Atlantic Ocean, and more significantly, the Bay. The WPCP was overwhelmed, and treatment was interrupted, releasing untreated effluent into the South Bay. Although the WPCP was partially operational within 12 hours after flood waters retreated, damages to equipment within the WPCP, such as its sand filter, have resulted in ongoing operational issues affecting the quality of treatment that the plant provides, particularly by impacting its ability to treat suspended solids. Consequently, since Sandy, the undertreated effluent from the Long Beach WPCP has contributed to lowering water quality in the South Bay and the tidal reach of the Mill River, impacting its ecology, the industries tied to it such as tourism and fishing, and the quality of life of residents of the South Shore and the Mill River watershed. In particular, the high nitrogen loads released by the plant has resulted in the mass proliferation of a species of macro-algae known as Ulva, whose decomposition in turn contributes to water-bottom hypoxia, resulting is the destruction of fish and shellfish habitat. Finally, the lasting impact of Superstorm Sandy's damage on the WPCP has contributed to the continuing loss of marshland in the Bay.

The South Bay's marshes represent a key economic, ecological and hazard mitigation asset for residents of the area. Marshes have a great ecological value, supporting a great diversity of plant and animal life, and serving as a nursery for a variety of fish and shellfish species. The marshes' biodiversity and natural beauty in turn sustains local industries and recreational activities, including tourism, fishing, and boating. Finally, marshes provide valuable environmental services such as carbon capture and water filtration, as well as the possibility for significant hazard mitigation, in the form of wave attenuation. A 2016 risk-based comprehensive modeling effort conducted by Lloyds of London/Nature Conservancy evaluated the effects of marsh systems on upland damage during Superstorm Sandy. The report estimated that coastal areas with large marsh systems contributed to a 10% average reduction in property damage within the associated census tracts, with damage reduction benefits in certain areas reaching as high as 29%.

The Bay has suffered an estimated loss of approximately 30 acres per year of marshland, largely due to marshland erosion exacerbated by nitrogen pollution, such as that caused by the Long Beach WPCP. Nitrogen pollution contributes to the degradation of tidal marshes by promoting the marsh vegetation to grow taller but produce fewer and less-dense root structures. These weakened root structures result in accelerated marshland erosion. When marshlands erode, their ability to attenuate wave action is also diminished, resulting in more powerful and higher waves and increased storm surge. During Sandy, storm surge rose through the Back Bay and into the mouth of the Mill River, flooding over 2,500 acres and 4,000 parcels in the LWTB project area, which likely could have been reduced by the presence of healthier marshes in the Bay.

As of APA 3326, the proposed Project would convert the Long Beach WPCP into a resilient pump station and construct a new force main to convey untreated effluent to the new state-of-the-art Bay Park Sewage Treatment Plant South Shore Water Reclamation Facility. The resilient pump station will be designed to withstand flooding from a 500-year storm. The design will also consider sea level rise and additional wave height protections. In addition, an elevated emergency generator will be constructed to provide power to the resilient pump station in the event of a power outage. The force main will consist of approximately 16,000 linear feet of pipe, connecting the resilient Long Beach pump station to the Bay ParkSouth Shore plant. Upon completion of the construction and activation of the resilient pump station and force main, the remainder of the Long Beach WPCP will be decommissioned. The scope of decommissioning and redevelopment is not part of this project. At that time, all tanks will be cleaned of residual material, equipment will be sold for reuse or for scrap value, the remaining structures will be demolished, and debris will be removed from site and disposed of appropriately. The newly cleared land will be graded and planted with salt-tolerant vegetation. The installation of green infrastructure measures such as bioswales and rain gardens to facilitate the collection and treatment of stormwater runoff from nearby areas will also be evaluated.

The Hempstead Bay Restoration component of the focus area will restore areas of Black Banks and Pearsalls Hassocks located along the path of the new Long Beach WPCP force main which will be constructed as part of the approved LWTB project. On Black Banks Hassock, the scope would consist of filling historic mosquito ditches with biodegradable materials, such as coir logs or mowed grass clippings, to promote sediment accretion within the ditches, and the creation of natural tidal channels (runnels) to enhance tidal hydrologic processes within the marsh. Low-lying marsh areas most vulnerable to flooding from sea-level rise will be targeted with the objective of establishing more stable marsh platforms.

On Pearsalls Hassock, the scope consists of remediating and restoring the hassock by removing abandoned sludge tank facilities, as necessary to support the restoration efforts and restoring the former sludge tank area, stabilizing the shoreline and restoring the low marsh behind the existing bulkhead to establish a long-term, sustainable shoreline and marsh habitat, re-grading the upland area using material from the shoreline stabilization, planting and seeding the upland area to establish a mosaic of native maritime shrubland and meadow, and removing the existing sludge dock structure, and overhead piping and supports by the sludge tank area.

The key benefit of the proposed project will be reducing the hazards posed by tidal inundation and storm surge during major storm events by converting the highly vulnerable Long Beach WPCP into a resilient pump station, and therefore mitigating the serious risk of storm events resulting in the release of untreated effluent into the Bay as well as attenuating storm surge by restoring tidal hydrology and upland habitat on the Hassocks. The removal of this risk is expected to help increase quality of life during increasingly frequent storm events and community resiliency in the face of sea level rise for residents of the portions of the Mill River watershed that are at risk of flooding from storm surge from the Bay. The proposed project is expected to also result in environmental and water quality improvements in the mouth and tidal reach of the Mill River by removing and remediating abandoned sludge tank facilities in the Bay and ending the release of undertreated effluent from the Long Beach plant into the interconnected Bay. Over the long term, the project is expected to help foster the conditions necessary for marsh regeneration in the South Bay.

The Long Beach project can thus serve as a catalyst for long-term, regional action to restore the South Bay's vital marshes, by improving water quality and therefore facilitating successful marsh restoration projects in the future. Nassau County, working through the South Shore Estuary Reserve Council will implement a long-term adaptive marshland restoration plan to provide crucial storm surge mitigation. In

this way, over the long-term, after the completion of the RBD LWTB project, the Long Beach project can facilitate further hazard mitigation for the Mill River watershed in the form of healthier marshes in the South Bay which can serve as a natural barrier against storm surges from future storms, in addition to their economic and ecological benefits to the region.

As of APA 3326, the Long Beach Wastewater Consolidation involves a series of projects with an estimated total cost of approximately $169 million for the resilient pump station and force main LWTB scope and the related plant decommission and satellite pump station mitigation projects, which are outside the scope of the LWTB project$93,878,880. This group of projects has been awarded $78.5 million in FEMA PA 406 Hazard Mitigation funds, with additional funds expected to be added to the award to cover the majority of the identified project costs, with additional State and CDBG-DR funds covering additional necessary and reasonable project implementation costs not funded by FEMA. Up to $16.5 million in LWTB CDBG-DR funds will be used for eligible costs for the LWTB focus area scope of the pump station, force main, and associated implementation costs, including non-federal share match and additional necessary and reasonable costs that are not covered by duplicative sources of funding. The remaining LWTB funds budgeted for this focus area will be utilized for 100% of the Hempstead Bay Restoration component costs of the Long Beach WPCP focus area, currently estimated at approximately $7.5 million. The estimated total project cost for the Long Beach WPCP focus area, including the pump station, force main, Hempstead Bay Restoration and associated implementation costs is approximately $160 million. LWTB will provide $24 million in CDBG-DR funding for this focus area in addition to $82 million in funds secured by the proposed subrecipient through FEMA PA 406 funds and SMLP loans and grants. Additional FEMA PA 406 funds are expected to be added to the award to address the remaining unmet need for the focus area.

The LWTB funded focus area project is estimated to cost $88.23 million dollars for the pump station replacement and connection to wastewater treatment facilities. LWTB will provide $24 million in CDBG-DR funding to the $88.23. million-dollar project. The LWTB-funded pump station and force main component of the Long Beach Wastewater Consolidation has is expected to reached 100% design with construction scheduled to begin in Q3 2023 with completion in Q4 of 2025.in the second quarter of 2021 with construction expected take place from the first quarter 2021 to the third quarter of 2023. The Hempstead Bay Restoration component has reached 100% design, with construction anticipated to begin the second half of 2023 with completion in the second half of 2025.

Focus Area - Social Resiliency Programs

The overall purpose of the Social Resiliency focus area is to strengthen the social infrastructure of communities within the LWTB project area through educational, workforce development, and social service programs that align with the goals of the LWTB project. GOSR intends to support the selected organization(s) in the planning and administration of the Social Resiliency Program through these objectives:

1. Provide Environmental Stewardship opportunities to (pre)K-12 students, higher education students, and other members of the community through:
    - Education about resiliency topics relevant to the LWTB project area, possible options including but not limited to: stormwater interventions included in the LWTB design; environmental awareness; wildlife conservation and ecology; watershed history; STEM/STEAM education and teacher training; on-site and hands-on education and teacher training; affordable housing; economic impacts of natural disasters; etc.
    - Environmental Education and Resiliency Center (as discussed previously).
    - Community service that complements the educational resiliency topics; and

- Monitoring, research, and data collection that allows students to engage in research projects pertaining to LWTB and monitors long-term effects of the interventions.

2. Develop Workforce Training vocational curriculum for ~~high school students, high school graduates, and/or~~ unemployed/under-employed residents seeking to gain skills as Environmental Technicians in construction. ~~Graduates of the program are eligible to continue to work on and support the LWTB project as helpers on site as part of Hofstra's externship program.~~

An example of a natural partner in this focus area is the Seatuck Environmental Association, which has held two "Day in the Life of the Mill River" events for school students on Long Island. Participation in the second year of the program targeted participation from schools in the Hempstead, East Rockaway, Rockville Centre and Oceanside districts. Seatuck has also held a series of public presentations, field trips and nature programs to introduce adults and families to the history, habitats and wildlife of the Mill River. Seatuck is also generating a partial baseline report on the Mill River's ecological health through a series of surveys and monitoring projects, including enhanced avian and wildlife studies along the Mill River as well as focused monitoring of the efficacy of the fish ladder installed at Smith Pond. LWTB has engaged Seatuck as an implementation partner able to help achieve the project's social resiliency objectives.

Currently, the estimated budget for this focus area is approximately $2~~1~~ million. This budget has been updated from approximately $1 million since APA 26 to extend and continue social resiliency programming through 2023 to take advantage of the new RBD grant expenditure deadline. A Notice of Available Funds (NOFA) was issued in May 2016 to solicit program proposals and costs for an organization to develop and perform the community education and training.

Following the NOFA process, GOSR selected Hofstra University as a LWTB Subrecipient to implement several educational and workforce development programs aligned with the LWTB objectives. These programs include a summer science research program focused on the Mill River watershed for local high schoolers; an environmental sustainability certificate program for local government staff, project workers, and policy makers; developing K-12 educational curriculum and professional development for educators focused on the science of climate change and natural hazards; developing educational signage for the LWTB project area; a workforce development program focused on training local adults in Environmental Technician ~~construction~~ skills and securing externships for enrollees to acquire hands-on experience; and student-written and produced progress videos for LWTB.

Benefit Cost Analysis

A BCA for the LWTB project was prepared following the HUD BCA Guidance provided in a HUD Guidance Notice (CPD-16-06). The analysis was completed using generally accepted economic and financial principles for BCA as articulated in OMB Circular A-94. For APA ~~26~~33, an updated BCA was prepared to reflect the updated scope, benefits, costs, projects and other details of the LWTB project included in this APA.

The BCA encompasses the project area as defined by the LWTB project area boundary. The following LWTB focus areas (see project descriptions above) are included in the BCA: Hempstead Lake State Park; East Rockaway High School Hardening; Smith Pond Drainage Improvements; Lister Park; East and West Boulevards Stormwater Retrofits; Long Beach Wastewater Consolidation Project; Social Resiliency Programs; and Greenway Network.

The combined cumulative net present value of activities associated with the eight focus areas is $~~211~~134 million and the combined Benefit Cost Ratio is 1.6~~2.4~~ These measures of project merit demonstrate that

the project is viable and would add value to the community, the environment, and the economy. Using a 7% discount rate, and a 50-year planning evaluation horizon, the project will generate significant net benefits to communities within the Mill River Watershed, as well as other beneficiaries from Nassau County and the region, including those who use the improved Hempstead Lake State Park and the new Greenway Network.

According to the BCA, the combined lifecycle costs to build and operate the proposed Project's assets for the LWTB project (amounting to $~~147~~210.4~~.1~~ million in constant ~~2018~~2022 present value dollars) would generate the following quantified benefits:

Total benefits of $~~358~~344.5~~.6~~ million, of which:

- Total Resiliency Values are $~~155.7~~144.2 million
- Total Environmental Values are $61.3~~47.1~~ million
- Total Social Values are $47.0 ~~34.3~~million, and
- Economic Revitalization Benefits are $92.0 ~~121.5~~million.

The BCA demonstrates that the LWTB project will generate substantial net benefits (i.e., the benefits exceed the costs of the LWTB project over its useful life). The benefits to the host community and region will be substantial and justify the costs of implementation and operations. The assets (i.e., physical improvements to Hempstead Lake State Park, East Rockaway High School, Smith Pond, Lister Park; East and West Boulevards Stormwater Retrofits; Long Beach Wastewater Consolidation Project and the Greenway Network) created or improved by the project enhancements will create large resiliency values, social values, environmental values and/or economic revitalization benefits.

The project components evaluated are at different stages of development and the costs and final scopes are subject to change as the designs progress and move through the environmental review and permitting processes. However, they are still expected to have a large positive benefit. The largest group of benefits consists of resiliency values relate to flood risk protection provided by the project's assets. The BCA, included at Appendix E to the New York State Action Plan, demonstrates and quantifies how the project reduces the flood risk. An excerpt from the LWTB BCA states, "the largest group of benefits consists of resiliency values related to flood risk protection provides by the projects' assets (p. vii, LWTB BCA)." The BCA shows that the LWTB project would generate approximately $144.17~~155.7~~ million in resiliency values and approximately $61~~47~~ million in environmental values in addition to social values and economic revitalization benefits.

The LWTB project BCA can be found at Appendix E to the New York State Action Plan at ~~https://stormrecovery.ny.gov/sites/default/files/crp/community/documents/20200519_Updated_LWTB_BCA_Final%20-%20Copy%20-%20Appendix%20E.pdf~~

https://stormrecovery.ny.gov/sites/default/files/crp/community/documents/LWTB2023BCANarrative.pdf

From pages 141-143 of the New York State Action Plan:

Maintenance and Operations

GOSR certifies that the long-term operation and maintenance of the LWTB RBD Project will be adequately funded from each governmental subrecipient's reasonably anticipated annual operating budget, recognizing that operation and maintenance costs must be provided from sources other than CDBG and CDBG–DR funds. As described below, GOSR will ensure the availability of funds through specific provisions within agreements with subrecipients.

Based on the BCA for LWTB, the present value of the operating and maintenance costs is estimated to be approximately $9.4~~8~~ million (with a basis of ~~2019~~2022-~~2069~~2072; constant ~~2018~~ 2022 dollars and a 7% discount rate). Specific costs will be identified as the design is finalized. OPRHP, on behalf of New York State and through a Memorandum of Understanding (MOU), is responsible for funding the long-term operations and maintenance of all components of the project within HLSP, including but not limited to the new building and the dams. Nassau County will be responsible for operating and maintaining the Long Beach pump station and force main. Specific roles and responsibilities will be included as part of the construction documents the contractor will develop for the project. Nassau County will have primary responsibility for overseeing O&M for the Long Beach Resilient Pump Station and force main. The remaining components of the project will be operated and maintained by the local government or authority with jurisdiction over the respective property or asset. For the Long Beach WPCP focus area, Nassau County will be the subrecipient for the Hempstead Bay Restoration component, while the City of Long Beach will be the subrecipient for the pump station and force main scope. These subrecipients will implement the construction of these components of LWTB through a subrecipient agreement with GOSR. The subrecipient agreement, monitored and enforced by the State, will specify the mandatory requirements of operating and maintaining each respective component of the project, including the annual expected cost expenditure by the local government. With the exception of some of the components (e.g., dams) within HLSP, backflow prevention devices in areas affected by tidal inundation, and the Long Beach Pump Station, LWTB is comprised of passive non-mechanical infrastructure that will improve drainage and reduce flooding throughout the Mill River watershed. Thus, as set out in the BCA, the annual operating costs of these components is expected to be low, and maintenance activities will consist of standard activities such as periodic inspections, cleaning, and repair, as necessary.

Through final design, GOSR will develop robust operation and maintenance (O&M) plans, along with budgets, by working collaboratively with appropriate State, county, city and federal agencies, as well as non-profit organizations. The O&M plans will describe the procedures and responsibilities for routine maintenance, communication, and timing of activation in the event of an impending storm. GOSR will serve as a monitoring entity with regard to enforcement of project O&M. O&M for each project component will be provided by the relevant subrecipient. The O&M commitments for project components will be established within applicable subrecipient agreements.

Budget

The overall budget proposal submitted to the RBD competition for the LWTB project was $177,366,078. Based upon the current design, the estimated project cost is $244,750,000~~189,226,000~~. With a CDBG-DR allocation of $125,000,000, the project has funding needs beyond the CDBG-DR allocation, that are expected to be met through leveraging funds from State and federal sources as described in the "Leveraging of funds" section. Should the situation change, the State will explore additional funding options to fill any unmet needs and analyze the budget further to implement a reduced scale project which still meets the project objectives. State Parks is targeting additional funding for upgrading infrastructure, public facility and environmental habitat management enhancements at the HLSP site. Additionally, the environmental review process will help shape the potential implementation requirements of the project not currently identified in the preliminary design phase. The estimated project budgets in the table below may differ from construction budgets included in the BCA for reasons including the inclusion of projected costs for compensatory mitigation, construction management and contingency funds, and/or funding for additional project elements that may be added as the projects move through the design process. The budget for the Greenway component included below does not include the portions of the

Greenway included in the Hempstead Lake State Park, Smith Pond, and Lister Park focus areas. Construction costs for these sections of the Greenway are included in the relevant focus area budget. Design costs for Hempstead Lake State Park are included in the Pre Development line item in the table below. Any budget changes will be reflected in future Action Plan Amendments when the project components are fully designed.

Table 41: Living with the Bay Budget

Breakdown	Cost
Planning	$4,507,266.03
Pre Development	$17,276,168.03
Construction - Hempstead Lake State Park	$25,656,429.68
Construction - Smith Pond Drainage Improvements	$8,750,000~~11,642,768.26~~
Construction - East and West Boulevards	$7,425,000
Construction – Lister Park	$104,6~~0~~00,000
Construction – Long Beach WPCP Consolidation	$24,000,000
Construction - East Rockaway High School Hardening	$4,601,0706~~,000,000~~
Construction - Greenway Network	$8~~13~~,02~~0~~00,000
Social Resilience Program	$2~~1~~,142,368
Program Delivery	$120,041~~150~~,698~~000~~
Total Allocated Budget	**$125,000,000**

Timeline

~~The State is in the preliminary design phases of the LWTB project components described above.~~ Set forth below is an overarching proposed timeline for the LWTB project. The State is committed to ensuring the timely expenditure of federal funds for the project, and is committed to designing the project so that it achieves the desired goals of the specific RBD disaster related purposes and support investments in resilient recovery. However, the State recognizes that changes in the project scope and timeline ~~design~~ may occur, depending on ~~the design stages,~~ permit issuance and environmental review requirements and changes as projects proceed through the construction phase. Any timeline changes will be reflected in future Action Plan Amendments ~~when the project is fully designed~~.

Table 42: Living with the Bay Proposed Schedule

	Start	Finish
Living with the Bay		
Study, Research Planning: This Phase will outline all additional studies, research and planning needed prior to the design and engineering phase. As necessary, this phase will be incorporated into the Environmental Review and Permitting stage as well as the Engineering Phase.	Quarter 1 2014	Quarter 2 2017
Environmental Review and Permitting: This Phase will include scoping for, and preparation of, an environmental review consistent with the National Environmental Policy Act (NEPA), as well as the submittal of permits applications to the appropriate governmental agencies. This Phase will include significant opportunities for public review and comment, as well as intergovernmental consultation. Additionally, as required by State and federal law, the environmental review will evaluate alternatives to the proposed project. This timeline is meant to represent an overview of the expected Environmental Review Process for all aspects of the LWTB project. It should be noted that the environmental review and permitting timeline is dependent on the permitting requirements of agencies with jurisdiction, including the United States Army Corps of Engineers, NOAA-NMFS, USFWS and the New York State Department of Environmental Conservation.	Quarter 1 2017	Quarter 4 2022~~0~~
Design and Engineering: This phase will include all design and engineering work required for LWTB culminating with complete construction specs. Depending on the progress and outcome of the Environmental Review and Permitting process, this process will be able to run concurrently for some components of the project. This phase will include any and all necessary procurement and contracting as appropriate.	Quarter 1 2017	Quarter 2 2022~~1~~

Site Development: This Phase will include all necessary elements for site development from the Design and Engineering Phase that will prepare for the construction phase of the LWTB project. GOSR will evaluate a potential phased site development schedule for different project components (e.g., upland components and in-water components).	Quarter 3 2017	Quarter 2 2021
Construction: This Phase will include all elements of construction related to the LWTB project outlined in the Design and Engineering Phase. For the LWTB project, the timeline is extended to reflect that the nature of the project will only allow for construction in specific building seasons. GOSR will evaluate a potential phase construction schedule for different project components (e.g., upland components and in-water components).	Quarter 2 2020	Quarter ~~43~~ 20253~~3~~
Closeout: This phase will include the closeout of the entire project, including but not limited to: final site visits and review, release of final contingency payments and all applicable CBDG-DR construction closeout requirements.	Quarter 3 2022	Quarter ~~43~~ 20253~~3~~

From pages 145-148 of the New York State Action Plan:

Living with the Bay

With respect to LWTB, GOSR has engaged in consultations with the SRIRC, USACE, NOAA/MFS, DEC, State Parks, U.S. Fish and Wildlife Service (USFWS), as well as Nassau County, the City of Long Beach, the Town of Hempstead, Village of Malverne, Village of East Rockaway, Village of Rockville Centre, the East Rockaway School District, and Village of Lynbrook (local governments) during its planning phase. GOSR provided a presentation on its LWTB planning efforts to the SRIRC Long Island Technical Coordination Team in May 2015. GOSR has held regular progress meetings with these stakeholders as well as HUD, the Technical Advisory Committee (TAC) and the Citizens' Advisory Committee (CAC). Among other activities, local governments will be involved in the environmental review process, evaluation of implementing partners, and establishment of long-term agreements between the State and relevant entities to ensure proper operation and maintenance of projects prior to construction. As of Q1 2020, GOSR has entered into agreements with State Parks, Seatuck, Hofstra University and Rockville Centre as described below. As all focus areas proceed through design, GOSR will develop a comprehensive implementation plan to identify partners with the appropriate capacity, experience and ability to work collaboratively to implement all interventions.

In November 2014, GOSR entered into a Memorandum of Understanding (MOU) with State Parks to perform improvements (unrelated to LWTB) to Robert Moses and Roberto Clemente State Parks. Amendment 1 to the MOU approved additional funds for studies to develop the LWTB project, including:

- Surveying lakes and ponds,
- Assessing groundwater depths and flows,
- Sampling and testing sediments for disposal,
- Investigating subsurface soils at the dam,
- Developing a stream gauge with telemetry based reporting of stream levels and flows, and
- Performing topographic surveys.

Amendment 2 to the MOU authorized State Parks to replace and repair all the equipment in the existing dams and equipment at the existing gatehouse, improve the NW Pond, improve the NE Pond, design and build a new Environmental Education and Resiliency Center, design and build an ADA accessible greenway, and design and build waterfront improvements. As of May 2020, State Parks has performed environmental and engineering studies to develop a scope and has completed final (100%) design of the first stages of improvements; received Authority to Use Grant Funds for the project, and begun construction work on the first stage of the project. State Parks has a demonstrated history of working with GOSR, to collaborate with other agencies and units of government, -resulting in a beneficial experience

that will assist in the successful implementation of key components of the LWTB project, such as the proposed improvements to Hempstead Lake State Park.

Seatuck has entered into a sub-recipient agreement with GOSR to: 1) consult on migratory fish and other ecological restoration, 2) conduct biological surveys of fish and bird populations, and 3) conduct environmental education related to the river's natural history. Seatuck staff participated in numerous strategy meetings and site visits throughout 2015 and 2016. These meetings, which involved NYSDEC, State Parks, USFWS and a host of various consultants, focused on opportunities for reconnecting the river to the bay, improving habitat and advancing migratory fish restoration. The LWTB project will benefit from the expertise of this partner, aiding the implementation of project components, particularly with regard to the project's social resiliency objectives.

GOSR entered into a sub-recipient agreement with Hofstra University on June 26, 2018, to implement various education and social resiliency programs described above in the social resiliency focus area for LWTB.

GOSR entered into a sub-recipient agreement with the Village of Rockville Centre on November 1, 2015 in anticipation of the Village leading implementation of Smith Pond and Lister Park. GOSR will coordinate its efforts with this valuable local partner as the project develops.

In August of 2020 GOSR entered a subrecipient agreement with East Rockaway School District to support the construction of the East Rockaway High School Project. In September of 2020 GOSR amended its existing subrecipient agreement with the Town of Hempstead to incorporate the Greenway and E/W Blvd. projects.

As of APA 3326, the proposed subrecipients for the remaining focus areas of ~~are as follows: East Rockaway High School Hardening- East Rockaway School District; East and West Boulevards and the Greenway- Town of Hempstead; and~~ Long Beach WPCP Consolidation are ~~-~~ Nassau County and the City of Long Beach.

GOSR is currently in discussions with the City of Long Beach to amend their subrecipient agreement to incorporate the pump station and force main elements of the Long Beach WPCP focus area. GOSR is also currently in discussions with Nassau County to amend their existing subrecipient agreement to incorporate the Hempstead Bay Restoration component of the Long Beach WPCP focus area. Both the Long Beach and Nassau County subrecipient agreement amendments are anticipated to be completed in Q1 2023 in advance of construction commencing in Q3 2023.

Leveraging of Funds

The State is committed to the successful implementation of both RBD projects using the allocations provided and understands the need to identify and secure additional funding outside of the CDBG-DR allocation as needed. This includes not only identifying funds to address the unmet needs identified in the awarded phases of the project, but identifying innovative funding mechanisms to pay for the long-term operation and maintenance costs of these projects. The State will look at funding opportunities such as federal, State or private grants, and collaboration with not for profit and academic institutions focused on similar resiliency actions, as well as financing opportunities, which can be leveraged alongside CDBG-DR for investment.

Table 43: Leveraging of Funds – RBD Unmet Need

Project	Location	Total Project Cost	CDBG-DR Allocation	RBD Unmet Need

Living Breakwaters	Richmond County	114,000,000*	$97,118,843	$0
Living with the Bay	Nassau County	$244,750,000~~189,226,000~~**	$125,000,000	$~~21,526,000~~ $53,814,881

**At final design; ** The design for each component of LWTB ~~ranges from preliminary designs through~~has reached 100% (final) designs*

The process to identify funding and financing opportunities for Living Breakwaters and LWTB started with a high-level review of both projects as a whole and the respective component phases. By taking this approach, the State can elucidate a variety of layered funding and financing opportunities. Many of the grant opportunities identified are both competitive and ongoing, based upon State and federal budget appropriations.

An important initial step will involve finalizing the entities implementing each component of each RBD project and evaluating if they can provide financial support and oversight, long term operations, and maintenance capacity for the project. There are some unique financing opportunities such as public-private partnerships, but this may entail a repayment to the private partner for their work. All options should be further based upon the ability and willingness of the entity implementing the project to entertain these options.

The State will utilize the following iterative approach as the process for assessing the need for and securing additional funding for each RBD project:

1. Prioritize Living Breakwaters and LWTB project components. Isolate components of both projects and identify the following items:
    a. Initial budget, including start-up and capital costs, ongoing operations, and maintenance;
    b. Identify entities/partners to implement, operate, and maintain the project post-completion; and,
    c. Develop time horizon for initial capital costs and ongoing operations and maintenance.
    d. Assess potential funding gaps or opportunities for scope enhancement
2. Organize sources of funding and financing based upon the initial assessment:
    a. Identify sources of funding from entities/partners implementing and operating the projects and agencies or organizations with aligned principles and/or missions to that of the RBD projects or project components;
    b. Prioritize funding opportunities based upon grant funding application dates and probability of success;
        i. Develop a layering strategy for each project component as needed;
    c. Identify if financing structures would be applicable to any components of both projects;
        i. Identify ability and willingness of local municipal partners to issue debt or take on long-term liabilities involving project finance;
    d. Engage not for profit, academic, corporate, and philanthropic partners with draft program framework for funding.
3. Continually update and monitor federal, State, and local grant opportunities.

The approach outlined above is achieving success for the Living Breakwaters project. The State is leveraging HUD's initial RBD allocation of $60,000,000 by providing $16,881,157 in State funds and $37,118,843 in additional CDBG-DR funds from the remainder of its PL 113-2 grant to complete the project. Additionally, the BOP is seeking additional funding to provide continued support for the social resiliency components of the Living Breakwaters project. Partnering with non-profit organizations and academic institutions will be key in identifying and applying for additional funds for each RBD project.

GOSR and implementing partners are and will continue to identify opportunities for funding to expand investment within the LWTB project area, identify complementary projects and/or fill potential future funding gaps.

In order to help leverage funds to enhance and expand LWTB, State Parks is considering pursuing a project (with funding through the Environmental Protection Fund) to develop an Invasive Species Management Plan to enhance the long-term sustainability of projects funded through CDBG-DR. Also, Parks is planning infrastructure upgrades and public facility enhancements at Hempstead Lake State Park with New York Works infrastructure funding. Projects would include upgrading the Park's primary electrical feed to one that is more energy efficient, constructing a new water main, formalizing a soccer field, upgrading tennis courts and basketball courts, receiving $500,000 to establish a program for at risk youth (Explorers Program) with the Nassau County Police Department and rehabilitating comfort stations to support increased visitation in the future. In addition, Parks is providing $8.4 million in State funds towards the construction of the HLSP focus area.

GOSR has had initial discussions with US EPA, NOAA and USACE regarding possible grants. GOSR will continue to monitor the availability of leverage funding from these sources to augment LWTB project components.

As part of the resiliency improvements at East Rockaway High School, the School District intends to secure non-GOSR funding to elevate the playing fields to eliminate frequent flooding that is currently experienced. Consideration will be given to installing an artificial turf to improve drainage. Potential grants will be pursued via the US Soccer Foundation and National Football League Foundation for the artificial turf, which would allow better drainage (to avoid flooding), greater field utilization and lower maintenance costs.

The Long Beach Wastewater Consolidation Project involves a series of projects with independent utility with an estimated total cost of- $169 million~~$93,878,880~~ for the force main, main pump station, satellite pump stations and plant decommissioning. -The LWTB funded focus area project is estimated to cost $160~~88.23~~ million dollars for the pump station replacement, ~~and~~ connection to wastewater treatment facilities, and Hempstead Bay Restoration. LWTB will provide $24 million in CDBG-DR funding to the $160~~88.23~~ million dollar project in addition to $82~~42.7~~ million in funds secured by the proposed subrecipient through FEMA PA 406 funds and SMLP loans and grants. Additional FEMA PA 406 funds are expected to be added to the award to address the remaining unmet need for the focus area ~~other NYS grants~~. ~~The proposed subrecipient intends to address the remaining unmet need through an application for additional State grants and a FEMA PA 406 Mitigation grant.~~ ~~The proposed subrecipient~~ Nassau County has made commitments to bridge any shortfall if additional funds~~grants~~ are not secured.

GOSR certifies that, for each RBD project, the preliminary design considers the appropriate code, or industrial design standard and construction standards, and that the final design will adhere to all relevant codes and statutes when it is complete. GOSR will have a registered professional engineer, or other design professionals, certify that the final design met the appropriate codes prior to the obligation of funds by the grantee for construction.

From Pages 149-151 of the New York State Action Plan:

Environmental Review for Rebuild by Design

The State plans to engage in robust and open public engagement throughout the environmental review process to ensure that the projects comply with State and federal environmental requirements and

consider sound environmental practices. The State will undertake the required environmental review process in accordance with the NEPA for each RBD project, which includes multiple opportunities for public review and comment. First, the State intends to hold public meetings on the draft scope for the process. These public meetings will abide by the notice and scheduling requirements set forth in 24 CFR 58.56 and 58.59. The State will accept both written and oral comments from the public on the draft scope, and the State will consider these comments when preparing the final scope of the projects. The purpose of these scoping public meetings is to allow community members and community organizations, the scientific and academic community along with the public as a whole, to raise issues and concerns to be evaluated in the environmental review process. This will ensure that the review is substantively robust, as well as responsive to any community issues with the projects. Once the environmental review process is completed the State will ensure that the community stays engaged in the process by soliciting, considering, and responding to public comments. The State is conducting a second round of public meetings and comment period following the completion of the Draft EIS. The State will also hold public meetings and comments with the RBD project-specific APA. As it prepares the final EIS, the State will consider and respond to the public comments.

On April 1, 2015, GOSR published the *Coastal and Social Resiliency Initiatives for Tottenville Shoreline, Staten Island, NY* EIS Draft Scope of Work[i] for the Living Breakwaters project. Oral and written comments were received during the public scoping session held on April 30, 2015, by GOSR serving under the auspices of the New York State Homes and Community Renewal's Housing Trust Fund Corporation, and in accordance with HUD regulations at 24 CFR Part 58. GOSR accepted written comments to the EIS Draft Scope of Work through the public comment period which ended June 15, 2015. The EIS Final Scope of Work for the *Coastal and Social Resiliency Initiatives for Tottenville Shoreline, Staten Island, NY* was published on April 2, 2016.[ii]

On March 24, 2017, GOSR published the Draft Environmental Impact Statement (DEIS) for the Living Breakwaters project. On March 31, the State submitted its Joint Permit Application to the USACE and NYSDEC for the project's major environmental permits. The timing of these actions reflects the fact that environmental permitting typically requires a project to have reached at least 30% design, and the permitting process runs concurrently with the NEPA process, as the permitting process relies on information within the DEIS. On April 1, 2015, the State published the *Coastal and Social Resiliency Initiatives for Tottenville Shoreline, Staten Island, NY* – Environmental Impact Statement Draft Scope of Work[iii] (Draft Scope of Work). The Final EIS was made available for public review on June 15, 2018 and the Record of Decision and Finding Statement was issued on August 31, 2018.

In December 2019 the New York State DEC issued its permit for the breakwaters component of the Living Breakwaters project. On October 12, 2018 the USACE issued a public notice regarding the project's permit application (ANAN-2017-00296-ESW) and the public was given an opportunity to provide comments. USACE issued it's permit in Q1 2021.

The permitting process for the oyster installation component of the project began in Q1 2021, and, as of APA 28, DEC and USACE permits for this component are expected in Q3 2022. Construction of the breakwaters component can begin before the oyster installation permits are received.

As of APA 3326, the LWTB project's focus areas ~~range from the preliminary design phase to~~have reached final (100%) designs, and the Hempstead Bay Restoration component~~project~~ continues to move through the environmental review and permitting processes. Based on the available information pertaining to the ~~-~~projects that will be completed through LWTB, GOSR does not ~~-~~need to complete an EIS for the LWTB Project. Rather, GOSR ~~is working to~~ completed Environmental Assessments and ~~to~~

issued Findings of No Significant Impact for multiple projects and groups of projects. Environmental permitting and Environmental Assessments are performed as each LWTB focus area enters the 60% design stage and is expected to occur according to the schedule at Table 42 The three focus area groupings for Environmental Assessments are HLSP, ~~which has received Authority to Use Grant Funds~~; Smith Pond, Lister Park, ERHS, East and West Boulevards, and the Greenway; and the Long Beach Wastewater Consolidation Project, which is being amended to include the Hempstead Bay Restoration component.

C. Offsetting Demolition Costs

Description of changes: As the NY Rising Homeowner Recovery and the NY Rising Rental Buildings Recovery Programs move toward closeout, in an effort to reduce applicants' recapture burden applicants previously deemed eligible under either Program who are now in recapture will be credited with the cost of demolition where no further construction was completed. Such properties will undergo a change of use from rehabilitation to clearance, which is an eligible Program activity, and will meet the Urgent Need National Objective.

From pages 59-60 of the New York State Action Plan:

NY Rising Housing Recovery Programs

The State initially allocated $838,000,000 to a slate of Housing Recovery Programs including homeowner reimbursement, mitigation, repair and reconstruction, and acquisitions and buyouts. The current allocation is $2,878,359,139.

In adherence to HUD's guidelines, all reconstructed and substantially damaged/substantially improved residential properties that complete reconstruction or rehabilitation and are located in a 100-year floodplain must be elevated pursuant to New York State Building Code minimum elevation requirements, which exceeds HUD mandated minimum elevation standards. All such ~~reconstructed and substantially damaged/substantially improved residential~~ properties must also incorporate Green Building Standards through the New York State Energy Conservation Construction Code of 2010. Due to the highly regulated nature of construction activities in New York State, compliance with the aforementioned requirements is determined through inspection and approval by the local code official that is vested with the authority to determine compliance with local and State requirements.

The State will also institute controls to conservatively identify substantially damaged or potential substantially im~~ap~~proved homes, and require that these homes that have been rehabilitated or reconstructed have done so to the satisfaction of the appropriate local floodplain official, as evidenced by appropriate documentation showing compliance with applicable requirements. Documented substantially damaged or improved homes that have been reconstructed or rehabilitated will not be closed out of the Program until they meet this requirement.

Rehabilitated r~~R~~esidential properties that are not reconstructed or substantially damaged/substantially improved will receive a mandatory prospective scope of work that incorporates the HUD Green Building Retrofit Checklist to the extent feasible.

In addition, all Applicants deemed eligible for the Housing Programs will have an opportunity to improve the resiliency of their storm-damaged property ~~–~~through elevation and/or mitigation efforts where appropriate.

The State is committed to assisting the unmet needs of PHA. As outlined in the unmet needs section of this Action Plan, the State, along with the PHAs and FEMA, are still in the process of assessing their unmet needs. As these needs are identified, the State has committed up to $10 million dollars as outlined in the initial Action Plan to assist these Authorities. The State identified areas in the following programs which are available to address these needs: Multi-Family/Affordable Housing Fund; the State Housing Assistance Relief Program; the Community Reconstruction Program; and the Non-Federal Share Match Program under the Infrastructure Program.

NY Rising Homeowner Recovery Program

The NY Rising Homeowner Recovery Program is now closed to new applications.

Activity Type: Repair, reconstruction, and mitigation of residential owner-occupied structures, and housing incentives

National Objective: Low- to Moderate- Income or Urgent Need

Geographic Eligibility: Disaster-declared counties outside of New York City

Eligible Activity: Sec. 105 (a) (4) 42 U.S.C. 5305(a)(4); Housing Incentives per FR-5696-N-01 (VI) (B) (29)

Eligible Applicants: This Program is available to owners of one- and two-unit owner-occupied homes, including condominiums, co-ops, and garden apartments, that are located outside of New York City with damage from Hurricane Irene, Tropical Storm Lee, and/or Superstorm Sandy.

Program Description: The NY Rising Homeowner Recovery Program includes the following components:

- Reimbursement: The Program provides reimbursement for eligible costs incurred by homeowners for completed home repair or reconstruction activities.
- Repair: The Program pays for approved and eligible costs to complete repairs to homes that have not yet been completed.
- Reconstruction: The Program pays for approved and eligible costs of reconstruction when a home is destroyed or determined not feasible to repair.
- Resiliency Measures: Resiliency measures such as home elevation, bulkhead repairs, and other storm mitigating measures, which help minimize future flood damage to storm-damaged Properties, are eligible funding activities.
- Housing Incentives: The Program provides housing Incentives to allow purchase of new manufactured housing units to replace storm-damaged manufactured housing.
- Flood Insurance Premiums: The Program provides offsets for the cost of initial insurance premiums purchased between application and construction completion for applicants in recapture where the applicant never had their flood insurance paid for by the Program.
- Demolition/Clearance: The Program provides offsets for the cost of demolition in limited circumstances where no further construction was completed for applicants in recapture.

The Program covers costs for the repair or replacement of damage to real property including mold remediation, replacement of disaster-impacted non-luxury residential appliances, and environmental and health hazard mitigation costs related to the repair or reconstruction of the disaster-impacted property.

Elevation to New York State Building Code minimum elevation requirements is required for reconstructed or substantially damaged/improved properties located in the 100-year floodplain. For homeowners that are not required to elevate, but who are interested in this protective measure, may opt to elevate their storm-damaged property through the optional elevation component. Optional mitigation measures are available for Applicants who are eligible participants in the NY Rising Housing Recovery Program whether or not they are within the 100-Year Floodplain. Such mitigation measures which include, but are not limited to, the following:

- Elevation of electrical systems and components;
- Securing of fuel tanks;
- Use of flood resistant building materials below base flood elevation (retrofits to be limited in scope to be cost effective;
- Installation of flood vents;
- Installation of backflow valves; and,

- Installation of roof strapping.

From page 69 of the New York State Action Plan:

NY Rising Rental Buildings Recovery Program

Activity Type: Repair, Reconstruction and mitigation including bulkheads of rental properties

National Objective: Low- and Moderate- Income, Urgent Need, or Slum and Blight

Geographic Eligibility: Disaster-declared counties, including New York City

Eligible Activity: Sec. 105 (a)(1)(2)(4) 42 U.S.C. 5305(a)(4) New Construction: FR-5696-N-01(VI)(B)(28)

Program Description: The NY Rising Rental Buildings Recovery Program is broken into components.

Rental Properties Program

The Rental Properties Program, formerly named the Small Rental Properties Program, is designed to assist storm-damaged rental properties. Davis-Bacon wages and other labor standards provisions apply where CDBG-DR is used for construction in properties of eight or more units. Eligible Applicants include condominium and cooperative owners who are the primary payee on all flood and other insurance.

Owner-occupied properties with two-units (those with one homeowner unit and one rental unit) will continue to be assisted through the Homeowner Program.

This Program is designed to restore residential rental properties located outside of New York City that were damaged by Hurricane Irene, Tropical Storm Lee, and/or Superstorm Sandy. The Program is intended to assist owners of damaged small and larger residential rental properties.

The Program operates under the following guidelines:

- The Program covers costs for reimbursement of eligible repair/replacement costs; the repair/replacement of damaged real property; replacement of disaster-impacted non-luxury residential appliances; and environmental and health hazard mitigation costs related to the repair of disaster-impacted property.
- The Program also covers costs (including elevation) to mitigate future damage for those properties that are located within a 100-year floodplain.
- The Program provides offsets for the cost of initial insurance premiums purchased between application and construction completion for applicants in recapture where the applicant never had their flood insurance paid for by the Program.
- The Program provides offsets for the cost of demolition in limited circumstances where no further construction was completed for applicants in recapture.
- Assistance is provided for unmet repair/reconstruction and elevation/mitigation needs after accounting for all federal, State, local and/or private sources of disaster-related assistance, including, but not limited to property owners' and/or flood insurance proceeds.
- Assistance for repair and elevation activities is capped at the lesser of a specified dollar amount to be determined by New York State, or the ACTUAL unmet repair, and elevation need as described above. To direct sufficient levels of assistance to those most in need, a higher overall dollar cap amount may be applied to those properties that are occupied by low- and moderate- income households and/or those properties serving low- and moderate- income renter households, where the need is justified.
- Household income verification documentation is required for tenants in affordable units for reporting purposes.

- Priority is given to owners of buildings where a minimum of 51% of the units are occupied by or will be occupied by low- and moderate- income persons and to owners of property with remaining repair needs.

From page 154 of the New York State Action Plan:

Anti-Displacement and Relocation: The State and Units of General Local Government (UGLGs), State agencies/authorities, and sub-recipients of New York State CDBG-DR funds are expected to minimize displacement of persons or entities and assist those displaced as a result of the disasters. If an individual person or entity is displaced as a result of the New York State CDBG-DR investment, the State provides assistance as required through the Uniform Relocation Act requirements.

GOSR defines a unit as not suitable for rehabilitation if it is:

a. a storm-damaged property eligible for a buyout, or

b. a storm-damaged manufactured home in a floodway or floodplain~~.~~, or

c. an owner-occupied unit or rental unit where the owner received an award for rehabilitation but completed only demolition.

Storm-damaged properties eligible for buyouts are located in certain high risk areas in the floodway or floodplain and determined to be among the most susceptible to future disasters. Floodways are the portions of the floodplain where flood hazard is generally the greatest, where structures commonly incur repeat flooding. Federal regulations prohibit funding for rehabilitation or reconstruction of a home in the floodway. Buyouts in these most susceptible areas improve the resiliency of the larger community by transforming parcels of land into wetland, open space, or stormwater management systems, creating a natural coastal buffer to safeguard against future storms.

Manufactured homes are susceptible to water damage and mold, making restoration to decent, safe and sanitary condition impractical and not cost-effective. Manufactured homes have limited capacity for safe, practical or cost-effective elevation. On-site manufactured home replacement without elevation would not result in a home resilient to future storms. Older manufactured homes constructed prior to June 15, 1976 cannot be rehabilitated to meet current HUD codes for manufactured home dwellings and would not meet municipal code requirements for lot sizes and coverage if rehabilitated.

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[i] https://stormrecovery.ny.gov/sites/default/files/uploads/coastal_and_social_resiliency_initiatives_-_tottenville_draft_scope.pdf
[ii] https://stormrecovery.ny.gov/sites/default/files/uploads/Coastal%20and%20Social%20Resiliency%20Initiatives%20-%20Tottenville%20FINAL%20SCOPE%20and%20RTC_1.pdf
[iii] https://stormrecovery.ny.gov/sites/default/files/uploads/coastal_and_social_resiliency_initiatives__tottenville_draft_scope.pdf